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| 09/368,635      | 08/04/1999  | MARTIN F. ARLITT     | 10981718-1          | 5764             |

7590 06/27/2003  
HEWLETT PACKARD COMPANY  
INTELLECTUAL PROPERTY ADMINISTRATION  
3404 E HARMONY ROAD  
P O BOX 272400  
FORT COLLINS, CO 80528-9599

EXAMINER

WOO, ISAAC M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2172

DATE MAILED: 06/27/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/368,635

Applicant(s)

ARLITT ET AL.

Examiner

Isaac M Woo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:



### **DETAILED ACTION**

1. This action is in response to Applicant's Requests for Reconsideration of "Final Rejection" made on paper # 16, filed on June 16, 2003 have been fully considered. The Requests for Reconsideration are persuasive. Thus, the "Final Rejection" has been withdrawn.
2. Claims 1-7 are pending.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman et al (U.S. Patent No. 6,236,369, hereinafter, "Sitaraman") in view of Chen et al (U.S. Patent No. 6,128,648, hereinafter, "Chen").

With respect to claim 1, Sitaraman discloses, in a data access network system that includes content server coupled to a plurality of proxy server via an interconnect

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network a system of maintaining content consistency between the content server and proxy server, (FIG. 2) subscription manager in the content server (74, mother cache, FIG. 2) for specifying all of the proxy servers (84, 96 and 98, local cache, FIG. 2) that are subscribed to a content file stored in the content server, see (FIG. 2, FIG. 3, col. 6, lines 63-67 to col. 7, lines 1-26, col. 7, lines 38-48, col. 9, lines 21-39) and consistency manager also in the content server in the content server for to notifying all of so subscribed proxy servers that cache the content file when the content file is updated in the content server those proxy server, see (col. 8, lines 10-16, col. 8, lines 51-55, col. 2, lines 25-35, col. 4, lines 7-13, synchronization). Sitaraman discloses the notifying updated information to proxy servers (col. 8, lines 10-16, col. 8, lines 51-55, col. 2, lines 25-35, col. 4, lines 7-13, synchronization). Sitaraman does not explicitly disclose discard the cache content file from those proxy servers. However, Chen discloses that the server updated the local cache with discard cache content of local cache, see (col. 1, lines 46-65). Therefore, it would have been obvious a person having ordinary skill in the art the time invention was made to combine discard the cache content file from those proxy servers of the system of Chen with the system of Sitaraman to update cache contents with discarding old cache contents. Because updating (synchronizing) cache contents with discarding old cache contents is essential to make content consistency and integrity between content server and proxy server.

With respect to claim 2, Sitaraman discloses, the subscription manager generates a subscription list that specifies all of the subscribed proxy servers that cache

the content file when the subscription manager is notified by each of the proxy servers that it has cached the content file, see (FIG. 2, FIG. 3, col. 6, lines 63-67 to col. 7, lines 1-26, col. 7, lines 38-48, col. 9, lines 21-39).

With respect to claim 3, Sitaraman discloses that the proxy servers notifies the subscription manager that it has cached the content file via an HTTP GET request with a SUB (subscription) header when the proxy server decides that the content file should be subscribed, see (col. 3, lines 55-67 to col. 4, lines 1-14, HTTP GET is basic web communication protocol).

With respect to claim 4, Sitaraman discloses if the proxy server decides that the content file is not a popular file, then that proxy server does not notify the subscription manager that it has cached the content file, see (col. 7, lines 1-28).

With respect to claim 5, Sitaraman discloses that the consistency manager notifies each of subscribed proxy servers via a DWS INV message when a content file has changed, see (col. 8, lines 10-16, col. 8, lines 51-55, col. 2, lines 25-35, col. 4, lines 7-13, cache synchronization is done by standard HTTP web protocol).

With respect to claim 6, Sitaraman discloses that the consistency manager also sends the updated content file to each of the proxy servers via an HTTP PUT request with a DWS SUB header, see (col. 8, lines 10-16, col. 8, lines 51-55, col. 2,

lines 25-35, col. 4, lines 7-13, cache synchronization is done by standard HTTP web protocol).

With respect to claim 7, Sitaraman discloses that the consistency manager notifies all of the proxy servers specified by the subscription manager to discard the cached contents file from the proxy servers when the content file is updated or deleted in the content server within a predetermined time interval, see (col. 8, lines 10-16, col. 8, lines 51-55, col. 2, lines 25-35, col. 4, lines 7-13).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Huang (U.S. Patent No. 6,438,576) discloses the system for a collaborative data network, which may include the Internet, has attached computing nodes, including object requestor nodes, object source nodes, and intermediate nodes which may be proxy servers. The method can allow each participating proxy server to adapt to the dynamic load conditions of itself as well as proxies, as well as to dynamic traffic conditions in the data network. The determination of which proxy or set of proxies is to perform object rendering and caching is based on a distributed, collaborative method that is adopted among the proxies.


***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

IMW  
June 25, 2003

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100